

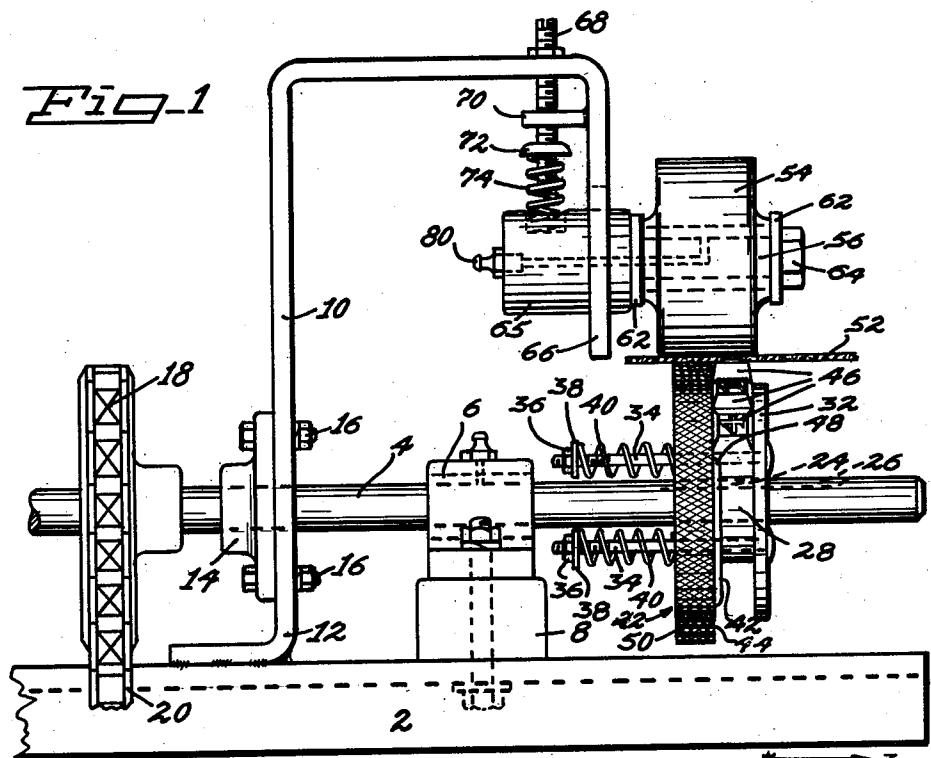
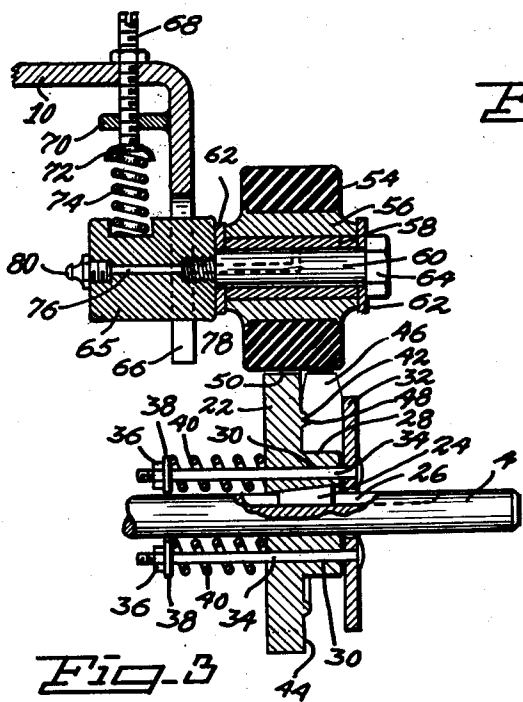
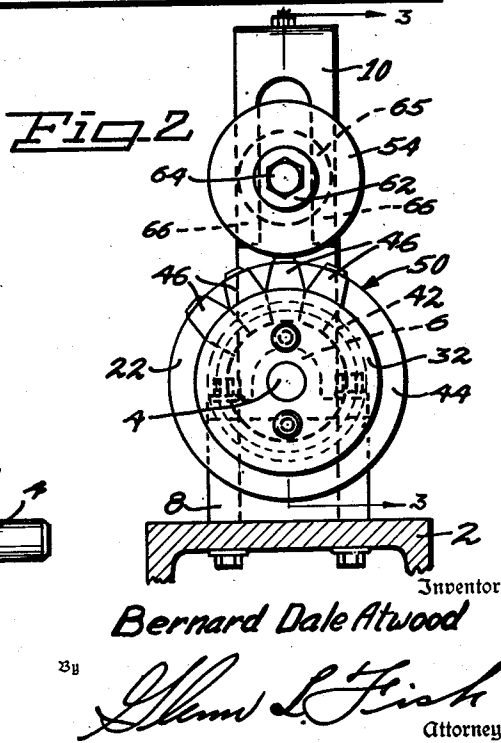
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MARKING MACHINE DIE HOLDER

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MARKING MACHINE DIE HOLDER

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1 Claim. (Cl. 101—377)

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My present invention relates to an improved marking machine die holder of the type normally comprising a blank of paper board adapted to be formed into a box by a suitable machine.

The marker of my invention consists of a pair of feed and presser rolls between which one wall of the box is pressed so that the dies associated with the feed wheel will imprint suitable indicia on the wall of the box. Code figures are found to be quite satisfactory in indicating contents, date of packing and other pertinent matter and the device of my invention is especially well adapted for use with cartons for frozen foods.

In the accompanying drawings I have illustrated one complete example of the physical embodiment of my invention according to the best mode I have thus far devised, but it will be understood that various changes and alterations may be made in the exemplified structure within the scope of the appended claim.

In the drawings:

Fig. 1 is a side elevational view of the marker of my invention.

Fig. 2 is an end elevational view thereof.

Fig. 3 is a sectional view at line 3—3 of Fig. 2.

Referring now to the drawings wherein I have illustrated the present preferred form of my invention I have shown the marker as supported on an angle frame 2 which may be secured to or part of any conventional carton forming machine.

A shaft 4 is journaled in bearing 6 mounted on block 8 on frame 2, and a supporting vertical frame 10 is bent at 12 and secured as by welding to frame 2. This vertical frame has secured thereto a second bearing 14 for shaft 4 secured by bolts 16, and the sprocket gear 18 on the shaft is driven by a chain 20 from a suitable power source.

On the free end of the shaft I employ a feed wheel 22 rotatable with the shaft by means of key 24 in key slot 26 and this wheel has a hub 28 having bores 30 therethrough. A plate 32 of greater diameter than the hub but lesser than the wheel is secured on the hub by means of bolt rods 34 having nuts 36 and washers 38 to confine coiled springs 40. Thus the plate 32 may be moved away from the hub against the springs as hereafter referred to.

The wheel 22 has a circular rib 42 on the face 44 and this rib coacts with dies 46 each having grooves 48 to receive the rib and the plate 32 secures the dies in position. The wheel 22 is knurled at 50 to feed the board 52 to be marked therethrough.

To maintain the board 52 in pressing contact with the dies, I use a presser wheel comprising a rubber ring 54 formed on a bushing 56 and adapted to receive the bearing 58 and this bearing fits onto the stub shaft 60 and is closed by washers 62 and secured by head 64 of shaft 60. The shaft 60 extends from a block 65 having an exterior groove to receive the forked legs 66

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of frame 10. A set screw 68 in frame 10 is threaded through a plate 70 and bears against the cap 72 of spring 74 to control the tension on the spring 74.

The block 62 and shaft 60 are bored at 76 and 78 to provide lubrication to the bearing 58 from stud 80 and it will be clear that with the tension of spring 74 set and the shaft rotating, a board 52 fed to the wheels will be impressed by the dies on the feed wheel. The dies may be easily and quickly changed and will operate with facility to code or mark box blanks.

Having thus fully described my invention what I claim as new and desire to secure by Letters Patent is:

A die holder for a rotary marking machine comprising a wheel having a hub integral with and projecting from one side of the wheel, said wheel being formed with a centrally located shaft-receiving bore and with transverse openings extending through the hub in spaced parallel relation to the bore and spaced from each other circumferentially of the hub, a circular plate disposed against the outer side of said hub and formed with a center bore and with openings registering with the bore of the wheel and with openings registering with the openings of said wheel, said plate being of appreciably greater diameter than the hub and for a portion of its diameter projecting radially from the hub and held in spaced relation to the confronting side face of the wheel by the hub and cooperating therewith to form side walls of a circumferentially extending die-receiving seat, the said confronting face of the wheel being formed with an annular rib concentric with its bore and spaced radially from the hub and constituting a circular die-anchoring member, elongated rods slidably passing through the registering openings in the plate and the wheel and projecting from the wheel at the opposite side thereof from the hub, each rod having one end formed with a head bearing against the outer side face of said plate and its projecting portion threaded at its end, springs about the projecting portions of said rods having inner ends abutting said wheel, and nuts screwed upon the threaded ends of said rods and applying tensioning pressure to outer ends of said springs.

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References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
1,643,349	Sanders	Sept. 27, 1927
1,726,611	Cook	Sept. 3, 1929
1,807,921	Lang et al.	June 2, 1931
2,058,232	Hunt	Oct. 20, 1936
2,227,694	Bates	Jan. 7, 1941
2,409,409	Wild et al.	Oct. 15, 1946
2,471,098	Davies	May 24, 1949
2,551,633	Preis	May 8, 1951